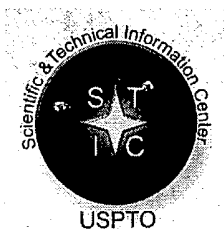


L Number	Hits	Search Text	DB	Time stamp
6	492	(564/152).CCLS.	USPAT; US-PGPUB	2004/09/28 16:10



# **STIC Search Report**

## **Biotech-Chem Library**

**STIC Database Tracking Number: 133744**

**TO: Shailendra Kumar**  
**Location: 5c03 / 5c18**  
**Tuesday, September 28, 2004**  
**Art Unit: 1621**  
**Phone: 272-0640**  
**Serial Number: 10 / 765602**

**From: Jan Delaval**  
**Location: Biotech-Chem Library**  
**Rem 1A51**  
**Phone: 272-2504**

**[jan.delaval@uspto.gov](mailto:jan.delaval@uspto.gov)**

### **Search Notes**

## SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: S. Kumar Examiner #: 69594 Date: 9/28/04  
 Art Unit: 1621 Phone Number 2-0640 Serial Number: 10 765 602  
 Mail Box and Bldg/Room Location: REM 5C03 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

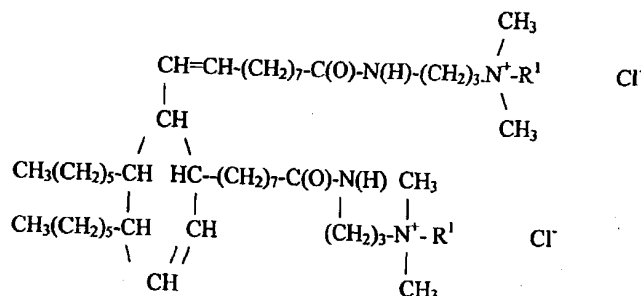
\*\*\*\*\*

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Dimer amidopropyl dimethyl quaternary compounds  
 Inventors (please provide full names): Anthony J. O'Leisek Jr. et al

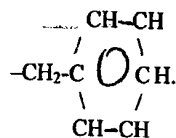
Earliest Priority Filing Date: 1/28/04

1. A quaternary compound conforming to the following structure:



wherein;

R<sup>1</sup> is selected from the group consisting of -CH<sub>3</sub>, -CH<sub>2</sub>-CH(OH)CH<sub>2</sub>OH and



2. A quaternary compound of claim 1 wherein R<sup>1</sup> is -CH<sub>3</sub>.

3. A quaternary compound of claim 1 wherein R<sup>1</sup> is -CH<sub>2</sub>-CH(OH)CH<sub>2</sub>OH.

*Jan 9/28/04*

=> fil reg

FILE 'REGISTRY' ENTERED AT 11:59:58 ON 28 SEP 2004

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STRUCTURE FILE UPDATES: 27 SEP 2004 HIGHEST RN 752974-11-1

DICTIONARY FILE UPDATES: 27 SEP 2004 HIGHEST RN 752974-11-1

TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

Please note that search-term pricing does apply when conducting SmartSELECT searches.

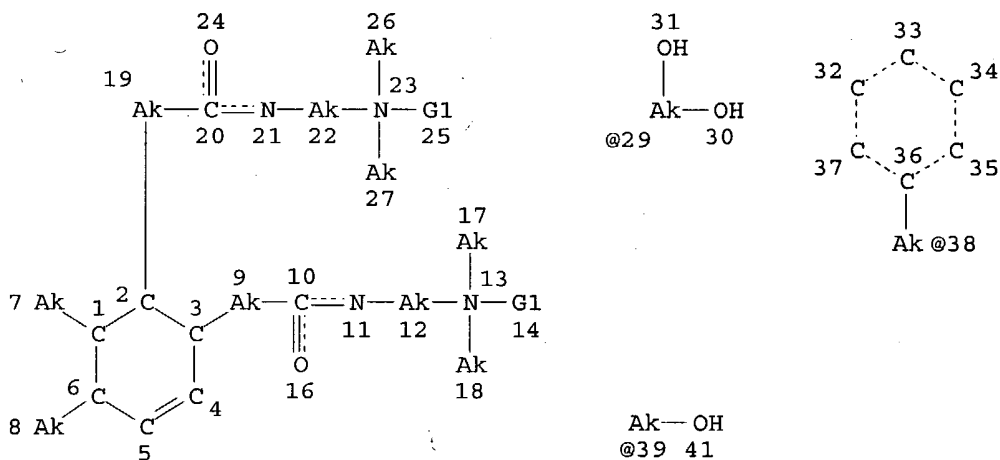
Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:

<http://www.cas.org/ONLINE/DBSS/registryss.html>

=> d sta que l6

L4 STR



VAR G1=AK/29/38/39

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DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 38

STEREO ATTRIBUTES: NONE

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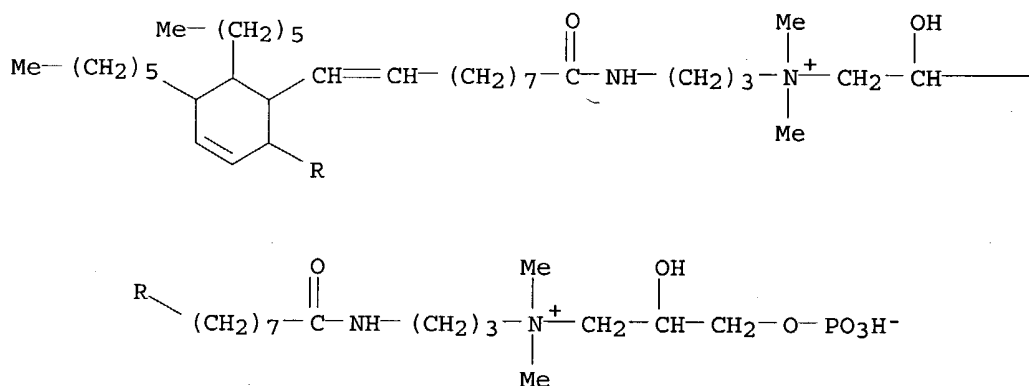
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3 ANSWERS

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L6 ANSWER 1 OF 3 REGISTRY COPYRIGHT 2004 ACS on STN  
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 MF C52 H102 N4 O12 P2 . 2 Na  
 SR CAS Client Services  
 LC STN Files: CA, CAPLUS, USPATFULL  
 DT.CA CAPLUS document type: Patent  
 RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)

PAGE 1-A



● 2 Na

PAGE 1-B

-CH<sub>2</sub>-O-PO<sub>3</sub>H<sup>-</sup>

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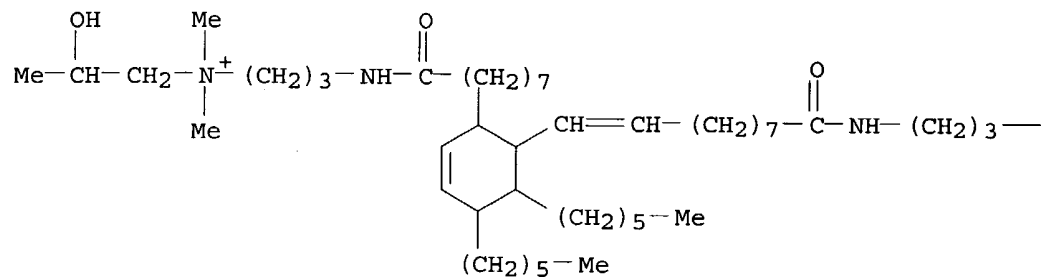
REFERENCE 1: 136:42546

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 MF C52 H102 N4 O4 . 2 N O3  
 SR CA  
 LC STN Files: CA, CAPLUS  
 DT.CA CAPLUS document type: Patent  
 RL.P Roles from patents: USES (Uses)

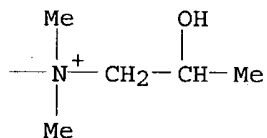
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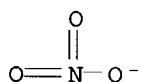


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CMF N O3

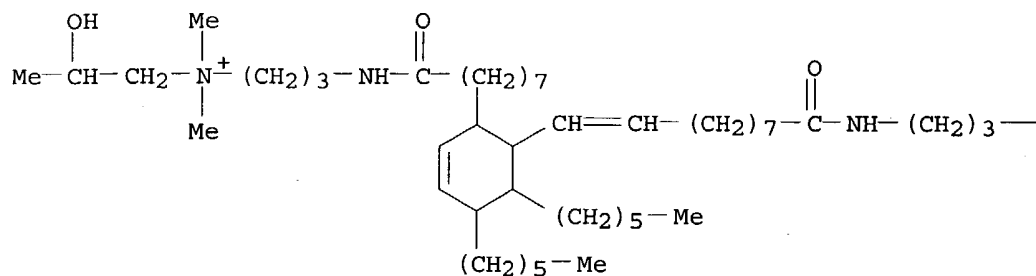


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1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

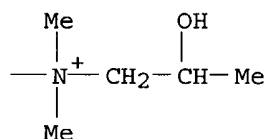
REFERENCE 1: 118:256656

L6 ANSWER 3 OF 3 REGISTRY COPYRIGHT 2004 ACS on STN  
RN 147831-23-0 REGISTRY  
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FS 3D CONCORD  
MF C52 H102 N4 O4  
CI COM  
SR CA

PAGE 1-A



PAGE 1-B



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L7 0 S L6

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L10 2 S L8,L9

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L11 1 S L6

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FILE COVERS 1907 - 28 Sep 2004 VOL 141 ISS 14  
FILE LAST UPDATED: 27 Sep 2004 (20040927/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

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L10 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2004 ACS on STN  
AN 2001:914993 HCAPLUS  
DN 136:42546  
ED Entered STN: 19 Dec 2001  
TI Dimer amidopropyl dimethyl phospholipids as barrier compounds  
IN Smith, Scott; Smith, Dean; O'Lenick, Anthony J., Jr.  
PA Colonial Chemical Inc, USA  
SO U.S.; 4 pp.  
CODEN: USXXAM  
DT Patent  
LA English  
IC ICM A61K007-42  
ICS A61K009-127; A61K031-685; A61K031-66; G01N033-92; C07F009-02  
NCL 424059000  
CC 62-4 (Essential Oils and Cosmetics)  
Section cross-reference(s): 23, 24  
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 6331293	B1	20011218	US 2001-872908	20010604
PRAI US 2001-872908		20010604		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 6331293	ICM	A61K007-42
	ICS	A61K009-127; A61K031-685; A61K031-66; G01N033-92; C07F009-02
	NCL	424059000

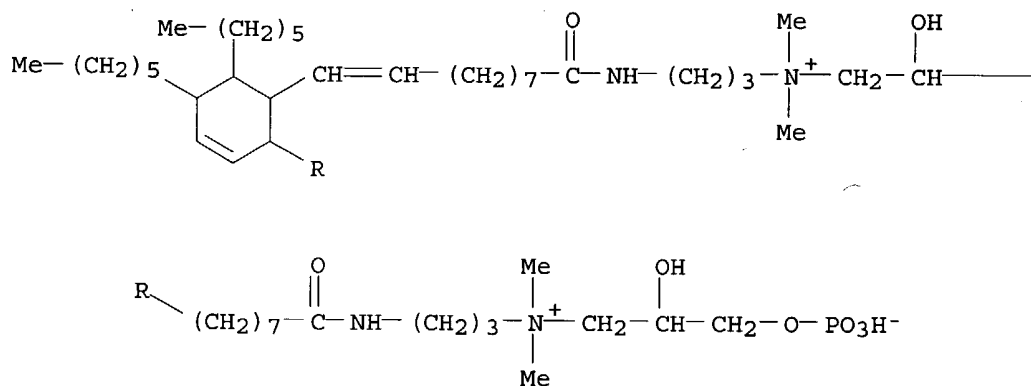
AB The present invention relates to compds. and, more particularly, to a class of compds. having specific quaternized amine based upon a dimer acid amido amine linked to specific phosphate esters. Dimer acid is a C-36 diacid having a cyclic structure and two amine groups that allow for the synthesis of a high mol. weight material phospholipid composition which is extremely substantive to human skin and are well tolerated by human tissue making them suitable for use preparation of barrier products for personal care applications. For example, .

ST dimer amidopropyl dimethyl phospholipid prepn barrier cosmetic  
IT Cosmetics  
(barrier; dimer amidopropyl di-Me phospholipids as barrier compds.)  
IT Phospholipids, biological studies  
RL: COS (Cosmetic use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(dimer amidopropyl di-Me phospholipids as barrier compds.)  
IT 360560-90-3P  
RL: COS (Cosmetic use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)



(dimer amidopropyl di-Me phospholipids as barrier compds.)  
 IT 106-89-8, Epichlorohydrin, reactions 109-55-7 47818-40-6  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (dimer amidopropyl di-Me phospholipids as barrier compds.)  
 IT 26807-13-6P, 3-Chloro-2-hydroxypropyl-phosphate 380413-64-9P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (dimer amidopropyl di-Me phospholipids as barrier compds.)  
 RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 RE  
 (1) Diery; US 3856893 1974 HCAPLUS  
 IT 360560-90-3P  
 RL: COS (Cosmetic use); SPN (Synthetic preparation); BIOL (Biological  
 study); PREP (Preparation); USES (Uses)  
 (dimer amidopropyl di-Me phospholipids as barrier compds.)  
 RN 360560-90-3 HCAPLUS  
 CN 1-Propanaminium, 3-[[8-[4,5-dihexyl-6-(17,20,20-trihydroxy-15,15-dimethyl-  
 20-oxido-10-oxo-19-oxa-11-aza-15-azonia-20-phosphaeicos-1-en-1-yl)-2-  
 cyclohexen-1-yl]-1-oxooctyl]amino]-N-[2-hydroxy-3-(phosphonooxy)propyl]-  
 N,N-dimethyl-, bis(inner salt), disodium salt (9CI) (CA INDEX NAME)

PAGE 1-A



● 2 Na

PAGE 1-B

—CH<sub>2</sub>—O—PO<sub>3</sub>H<sup>-</sup>

L10 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1993:256656 HCAPLUS  
 DN 118:256656  
 ED Entered STN: 26 Jun 1993  
 TI Coating of plastic moldings after treatment with quaternary ammonium  
 compound  
 IN Akeboshi, Koji; Uohashi, Hiromichi; Shimizu, Shigeru; Hayashibe, Kunihiro  
 PA Nihon GE Plastics, Ltd., Japan; Yoshimura Oil Chemical Co., Ltd.  
 SO Jpn.. Kokai Tokkyo Koho, 6 pp.  
 CODEN: JKXXAF  
 DT Patent

LA Japanese  
 IC ICM C08J007-04  
 ICS B05D003-10; B05D007-02  
 CC 42-2 (Coatings, Inks, and Related Products)  
 Section cross-reference(s): 46

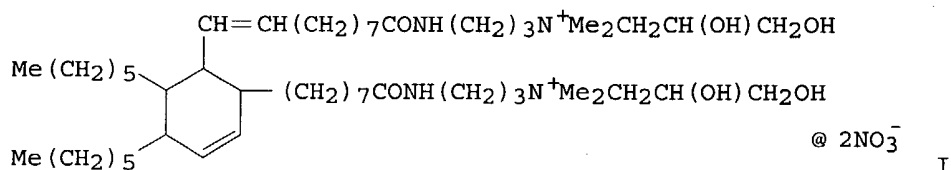
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	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 04202336	A2	19920723	JP 1990-333351	19901129
PRAI	JP 1990-333351		19901129		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 04202336	ICM	C08J007-04
	ICS	B05D003-10; B05D007-02

GI



- AB Plastic moldings such as automobile bumpers or bodies are treated with surfactants containing  $\geq 30\%$  (non)cyclic dimer or trimer acid-based quaternary ammonium compds. before coating with primers to ensure low surface resistivity and give smooth top coatings. A GTX 6006 (polyamide-polyoxyphenylene blend) molding was soaked in aqueous H<sub>3</sub>PO<sub>4</sub>, washed with water, dried, soaked in iso-PrOH containing 1% I (Elic PS 920), and dried at 75° to give a sheet with resistivity 2.3 + 108  $\Omega$ -cm initially and 7.7 + 108  $\Omega$ -cm after 30 min at 160°, vs. 6.8 + 108 and 1012, resp., with C17H35CONH(CH<sub>2</sub>)<sub>3</sub>N<sup>+</sup>Me<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>OH NO<sub>3</sub>- instead of I.
- ST dimer acid ammonium surfactant primer; trimer acid ammonium surfactant primer; automobile coating primer surfactant pretreatment; bumper automobile coating surfactant
- IT Surfactants  
 (ammonium compds., plastic moldings treated by, for primer and topcoat smoothness)
- IT Coating process  
 (of plastic moldings, surfactant treatment in, for primer and topcoat smoothness)
- IT Automobiles  
 (bumpers, coating of, ammonium surfactant in, for primer and topcoat smoothness)
- IT **147831-24-1**  
 RL: USES (Uses)  
 (surfactants, plastic moldings pretreated by, for primer and topcoat smoothness)
- IT **147831-24-1**  
 RL: USES (Uses)  
 (surfactants, plastic moldings pretreated by, for primer and topcoat smoothness)
- RN 147831-24-1 HCAPLUS
- CN 1-Propanaminium, 3-[[8-[4,5-dihexyl-6-[10-[[3-[(2-hydroxypropyl)dimethylammonio]propyl]amino]-10-oxo-1-decenyl]-2-cyclohexen-1-yl]-1-oxooctyl]amino]-N-(2-hydroxypropyl)-N,N-dimethyl-, dinitrate

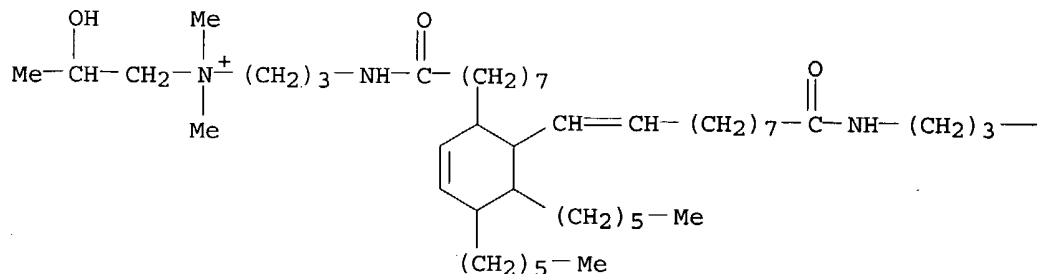
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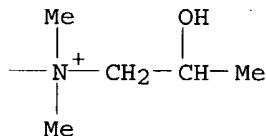
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CMF C52 H102 N4 O4

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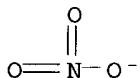
PAGE 1-B



CM 2

CRN 14797-55-8

CMF N O3



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CA INDEXING COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPAT2' ENTERED AT 12:00:52 ON 28 SEP 2004

CA INDEXING COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

=&gt; d bib abs hitstr l11

L11 ANSWER 1 OF 1 USPATFULL on STN

AN 2001:231045 USPATFULL

TI Dimer amidopropyl dimethyl phospholipids as barrier compounds

IN Smith, Scott, Chattanooga, TN, United States

Smith, Dean, Chattanooga, TN, United States

O'Lenick, Jr., Anthony J., Dacula, GA, United States

PA Colonial Chemical INC, South Pittsburgh, TN, United States (U.S. corporation)

PI US 6331293 B1 20011218  
 AI US 2001-872908 20010604 (9)  
 DT Utility  
 FS GRANTED  
 EXNAM Primary Examiner: Pryor, Alton  
 CLMN Number of Claims: 4  
 ECL Exemplary Claim: 1  
 DRWN No Drawings  
 LN.CNT 192

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to compounds and, more particularly, to a class of compounds having specific quaternized amine based upon a dimer acid amido amine linked to specific phosphate esters. Dimer acid is a C-36 diacid having a cyclic structure and two amine groups that allow for the synthesis of a high molecular weight material phospholipid composition which is extremely substantitive to human skin and are well tolerated by human tissue making them suitable for use preparation of barrier products for personal care applications.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

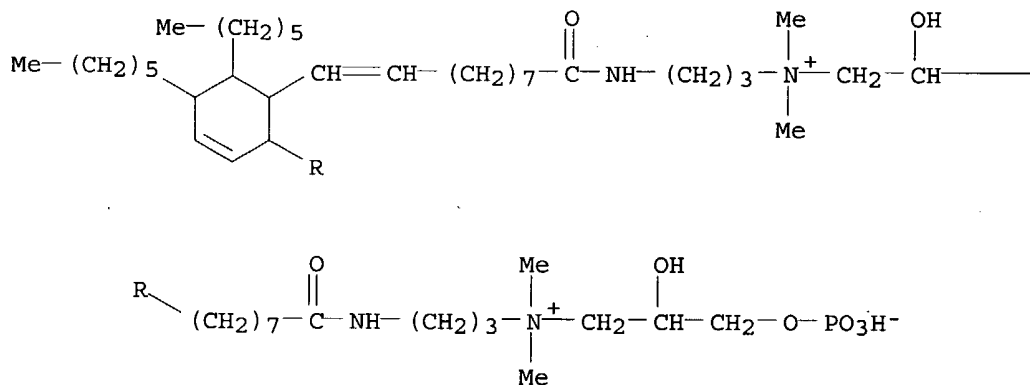
IT 360560-90-3P

(dimer amidopropyl di-Me phospholipids as barrier compds.)

RN 360560-90-3 USPATFULL

CN 1-Propanaminium, 3-[[8-[4,5-dihexyl-6-(17,20,20-trihydroxy-15,15-dimethyl-20-oxido-10-oxo-19-oxa-11-aza-15-azonia-20-phosphaeicos-1-en-1-yl)-2-cyclohexen-1-yl]-1-oxooctyl]amino]-N-[2-hydroxy-3-(phosphonooxy)propyl]-N,N-dimethyl-, bis(inner salt), disodium salt (9CI) (CA INDEX NAME)

PAGE 1-A



● 2 Na

PAGE 1-B

—CH<sub>2</sub>—O—PO<sub>3</sub>H<sup>-</sup>

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\* \* \* \* \* STN Columbus \* \* \* \* \*

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STRUCTURE FILE UPDATES: 27 SEP 2004 HIGHEST RN 752974-11-1

DICTIONARY FILE UPDATES: 27 SEP 2004 HIGHEST RN 752974-11-1

TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

Please note that search-term pricing does apply when  
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more  
information enter HELP PROP at an arrow prompt in the file or refer  
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<http://www.cas.org/ONLINE/DBSS/registryss.html>

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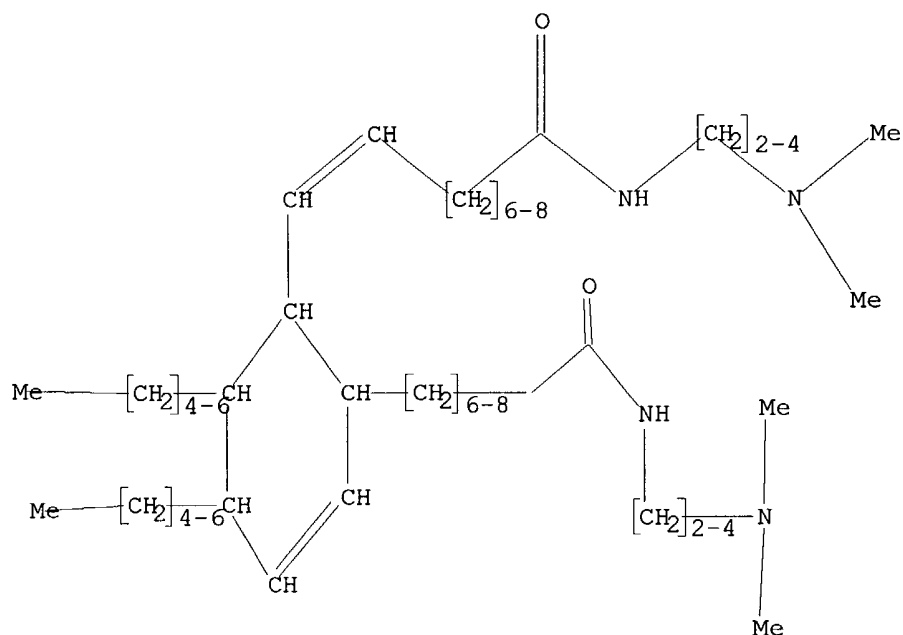
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L1 STR



Structure attributes must be viewed using STN Express query preparation.

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SEARCH TIME: 00.00.01

0 ANSWERS

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 1 TO 80  
PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

=> s 11 ful

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SEARCH TIME: 00.00.01

0 ANSWERS

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